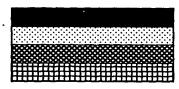
Figure 1A



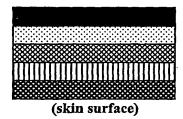
backing layer adhesive layer controlled-release composition layer peel-off backing layer

Figure 1B



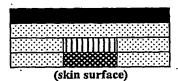
backing layer adhesive layer controlled-release composition layer

Figure 1C



backing layer
adhesive layer
cushion layer
absorbent layer
controlled-release composition layer

Figure 1D



backing layer
adhesive layer
absorbent layer (inside) surrounded by an outer ring of adhesive (outside)
controlled-release layer (inside) surrounded by an outer ring of adhesive (outside)

Figure 2. % Protease B enzyme released from PSA/PVA formulations. Release is presented as cumulative enzyme activity, as a percentage of the total enzyme added, in buffered media in contact with the controlled release material sampled at 0.16,1,2,4,8,16 and 24 hour time points.

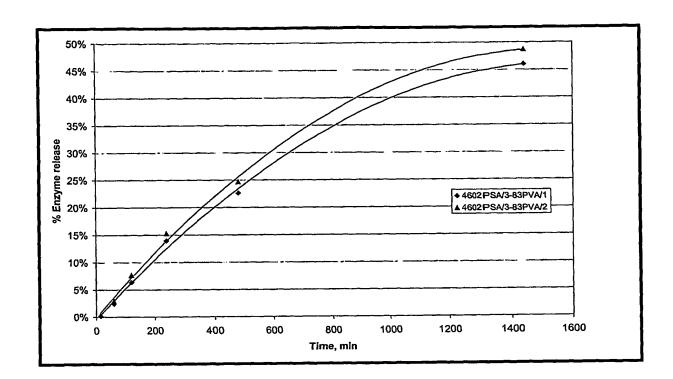


Figure 3. Enzyme released from varying levels of LG12-containing PSA 7-4602 / PVA Patches. Release is presented as cumulative enzyme activity in buffered media in contact with the controlled release material sampled at 0.16,1,2,4,8,16 and 24 hour time points.

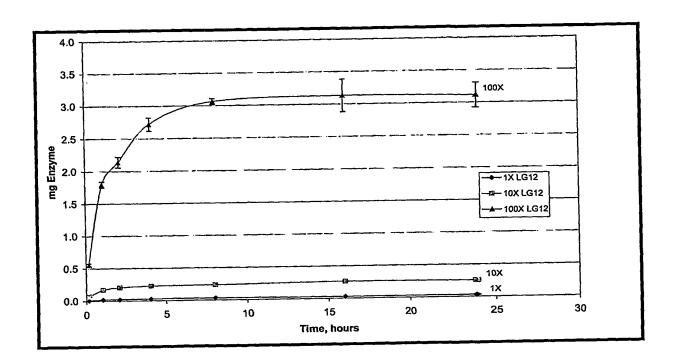


Figure 4. % Protease B enzyme released from 2220 formulations. Release is presented as cumulative enzyme activity, as a percentage of the total enzyme added, in buffered media in contact with the controlled release material sampled at 0.16,1,2,4,8,16 and 24 hour time points.

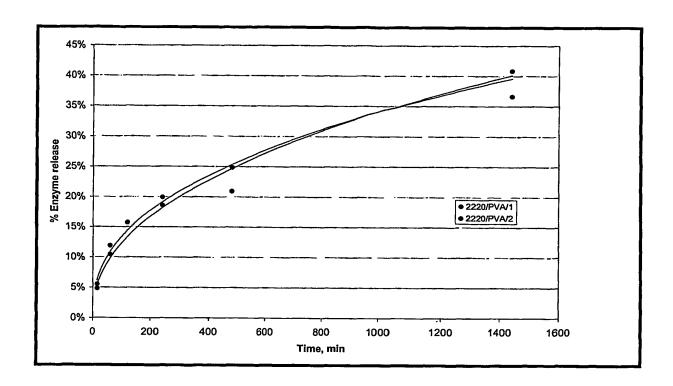


Figure 5. % Protease B enzyme released from 9090 formulations. Release is presented as cumulative enzyme activity, as a percentage of the total enzyme added, in buffered media in contact with the controlled release material sampled at 0.16,1,2,4,8,16 and 24 hour time points.

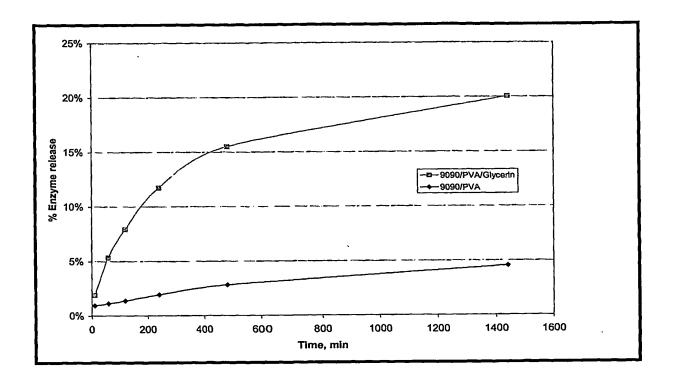


Figure 6. The effect of glycerin on % Protease B enzyme released from PSA / PVA formulations. Release is presented as cumulative enzyme activity, as a percentage of the total enzyme added, in buffered media in contact with the controlled release material sampled at 0.16,1,2,4,8,16 and 24 hour time points.

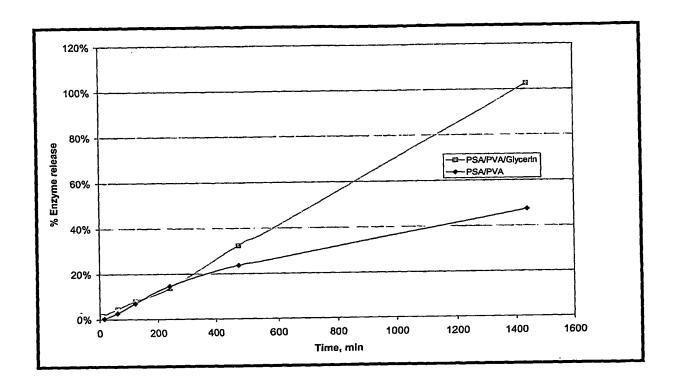


Figure 7. The effect of processing on the release of the LG12 enzyme. Release is presented as cumulative enzyme activity, as a percentage of the total enzyme added, in buffered media in contact with the controlled release material sampled at 0.16,1,2,4,8,16 and 24 hour time points. This compared the relative release from Oil in Water emulsions (2 step PSA addition) versus Water in Oil emulsions (1 step PSA addition)

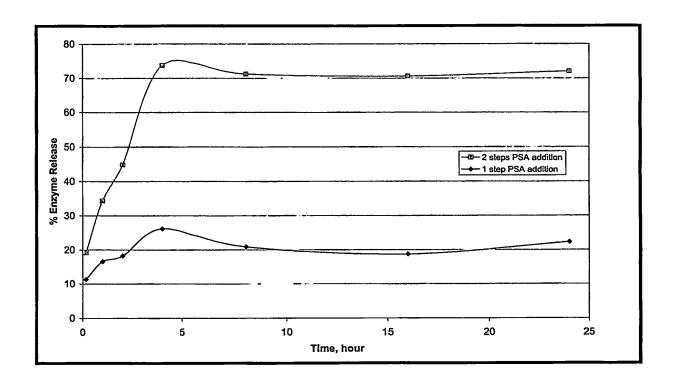
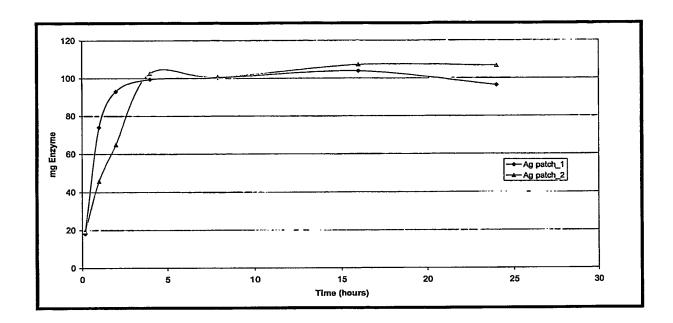
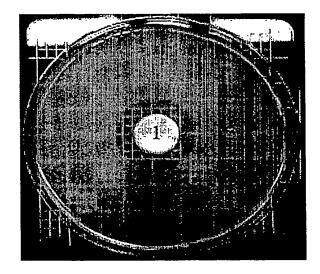
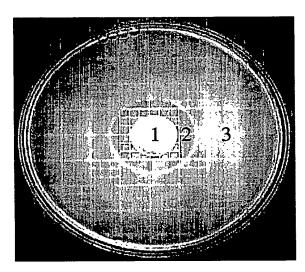


Figure 8. LG 12 released from PSA 7-4602 / PVA / colloidal silver patches. Release is presented as cumulative enzyme activity, as a percentage of the total enzyme added, in buffered media in contact with the controlled release material sampled at 0.16,1,2,4,8,16 and 24 hour time points.



LG12 enzyme release from a PSA/PVA / colloidal silver formulation on Figure 9. a skim milk plate in 24 hours. Released protease creates a zone of clearing as the casein is hydrolyzed.

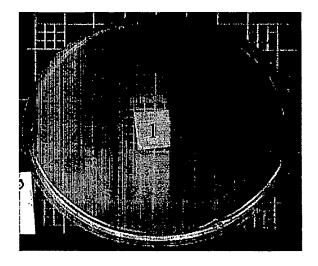


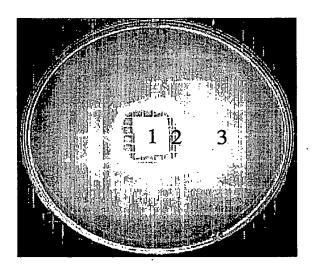


BEST AVAILABLE COPY

sample film.
 clear zone indicative of proteolytic digestion of skim milk protein.
 non-digested skim milk protein.

Figure 10. LG12 enzyme release from a PSA/PVA / DC 5700 formulation on a skim milk plate in 24 hours. Released protease creates a zone of clearing as the casein is hydrolyzed.





sample film.
 clear zone indicative of proteolytic digestion of skim milk protein.
 non-digested skim milk protein.

Figure 11. LG12 released from PSA 7-4602 + PVA patch formulation (10

incubation at 42°C). Release of active enzyme is compared with material tested before incubation of the release material in an oven at 42 °C. Samples we stored either directly in the oven (uncovered) or in a small plastic petri dish to retard evaporation (covered)

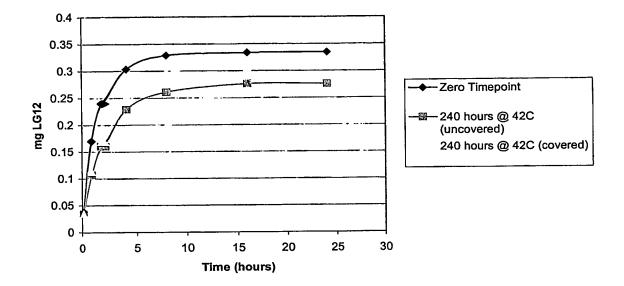


Figure 12. LG12 released from PSA 7-4602 + PVA patch formulation (20-day incubation at 42°C). Release of active enzyme is compared with material tested before incubation of the release material in an oven at 42 °C. Samples we stored either directly in the oven (uncovered) or in a small plastic petri dish to retard evaporation (covered)

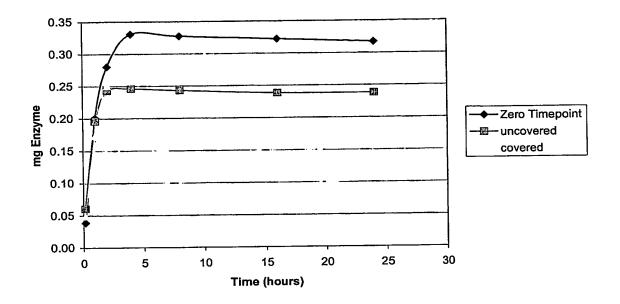


Figure 13. Enzyme released from a PVA + PSA 7-4602 patch formulated with varying levels of DC 3563. Release is presented as cumulative enzyme activity, as a percentage of the total enzyme added, in buffered media in contact with the controlled release material sampled at 0.16,1,2,4,8,16 and 24 hour timepoints.

